



Docket No.: 198092US2S DIV

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

RE: Application Serial No.: 09/684,904

Applicants: Hironobu KON, et al.

3<sup>rd</sup> RCE March 29, 2005

Filed:

For: VOLTAGE-DRIVEN POWER SEMICONDUCTOR  
DEVICE

Group Art Unit: 2891

Examiner: Farahani, D.

SIR:

Attached hereto for filing are the following papers:

**STATEMENT OF SUBSTANCE OF INTERVIEW**

Our check in the amount of \_\_\_\_\_ is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

Eckhard H. Kuesters  
Registration No. 28,870  
Attorney of Record

Raymond F. Cardillo, Jr.  
Registration No. 40,440

Customer Number  
**22850**  
(703) 413-3000 (phone)  
(703) 413-2220 (fax)



DOCKET NO: 198092US2S DIV

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF

:

HIRONOBU KON, ET AL.

: EXAMINER: FARAHANI, D.

SERIAL NO: 09/684,904

:

3<sup>RD</sup> RCE FILED: MARCH 29, 2005

: GROUP ART UNIT: 2891

FOR: VOLTAGE-DRIVEN POWER  
SEMICONDUCTOR DEVICE

:

STATEMENT OF SUBSTANCE OF INTERVIEW

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

In response to the communication mailed April 19, 2005, a Statement of the Substance of the Interview is stated as follows:

On April 14, 2005, a discussion was held between Applicants' representative and Examiner Farahani to insure the Examiner understanding of the Amendment that was entered with the RCE.

In this regard, Applicants' representative pointed out that the independent claims now all require that the current sense emitter must be "electrically" separated from the main emitter, which is the exact opposite of the case with the Yanagisawa voltage sense emitter. In this last regard, Applicants' representative emphasized that the voltage sensing emitter of the IGBT of Yanagisawa must be in direct electrical contact with the main emitter so as to be able to sense the voltage on the main emitter. The manner in which all of the embodiments of Yanagisawa show the electrical connection between the main emitter and voltage sense emitter of the Yamagisawa IGBT was also noted. In addition to discussing Yanagisawa,

Application No. 09/684,904  
Reply to Communication of 04/19/05

Applicants' representative noted how the figures from the handbook included with the above-noted Amendment buttressed Applicants' argument in terms of showing the symbol for a main emitter and current sense emitter in Figure 7.46 that was similar to the symbol in our FIG. 24 that also showed a main emitter and a current sense emitter. Applicants' representative further noted how the current sense emitter was shown to be separated electrically from the main emitter in Figure 7.49, for example. Finally, the showings of Figure 7.50 were noted as to the main IGBT and a current sense IGBT being separately formed in the device substrate.

The Examiner agreed that there were differences between the Yanagisawa voltage sensing emitter that had to be electrically connected to the main emitter and the claimed current sense emitter that has to be separated electrically from the main emitter of the claimed IEGT. The Examiner noted, however, that a further search and consideration of these arguments that were in the above-noted Amendment would be required and that we should be receiving a new Office Action in the near future relative to this application reflecting the results of this new search and consideration.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

Eckhard H. Kuesters  
Attorney of Record  
Registration No. 25,599

Raymond F. Cardillo, Jr.  
Registration No. 40,440

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 06/04)

I:\ATTY\RFC\19\198092.SUBSOFINTERVIEW.DOC